

Amendments to the Claims

The following Listing of Claims replaces all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1 (original): A communications module, comprising:
a data channel operable to translate data signals in at least one direction between a transmission cable interface and a host device interface and having a variably configurable termination impedance at a host device node connectable to a host device; and
a termination impedance controller operable to set the variably configurable termination impedance of the data channel.

Claim 2 (original): The communications module of claim 1, wherein the data channel comprises a variable resistance circuit at the host device node.

Claim 3 (original): The communications module of claim 2, wherein the variable resistance circuit comprises a transistor with a voltage-controlled resistance value.

Claim 4 (original): The communications module of claim 2, wherein the variable resistance circuit comprises a resistor connected in series with a switch.

Claim 5 (original): The communications module of claim 2, wherein the variable resistance circuit presents different termination impedances at the host device node in response to receipt of different respective electrical control signals from the termination impedance controller.

Claim 6 (original): The communications module of claim 2, wherein the variable resistance circuit comprises a mechanical switch for selectively connecting the host device node to different termination impedances, and the termination impedance controller enables manual control of the mechanical switch.

Claim 7 (original): The communications module of claim 1, wherein the termination impedance controller is operable to selectively set the variably configurable termination impedance of the data channel to a differential resistance of 150 ohms in a first configuration mode and to set the variably configurable termination impedance of the data channel to a differential resistance of 100 ohms in a second configuration mode.

Claim 8 (original): The communications module of claim 1, further comprising a housing containing the data channel.

Claim 9 (original): The communications module of claim 8, wherein the housing has a transmission cable interface end and a host device interface end.

Claim 10 (original): The communications module of claim 9, wherein the host device interface end of the housing is pluggable into a receptacle of a host device.

Claim 11 (original): The communications module of claim 1 implemented in accordance with a small form pluggable (SFP) configuration or a small form factor (SFF) configuration.

Claim 12 (original): The communications module of claim 1 implemented in accordance with a Giga-Bit Interface Converter (GBIC) configuration.

Claim 13 (original): The communications module of claim 1, wherein the data channel provides multiple channel transmission of data in at least one direction between the transmission cable interface and the host device interface.

Claim 14 (original): The communications module of claim 1, wherein the data channel is operable to translate data signals in both directions between the transmission cable interface and the host device interface.

Claim 15 (original): A communications module, comprising:

a receiver data channel operable to translate data signals from a transmission cable interface to a host device interface and a transmitter data channel operable to translate data signals from the host device interface to the transmission cable interface, wherein each of the receiver data channel and the transmitter data channel has a respective variably configurable termination impedance at a respective host device node connectable to the host device;

a termination impedance controller operable to set the respective variably configurable termination impedance of each of the receiver data channel and the transmitter data channel; and

a housing containing the receiver data channel, the transmitter data channel, and the termination impedance controller, and having a transmission cable interface end connectable to a transmission cable and a host device interface end connectable to a host device.

Claim 16 (original): The communications module of claim 15, wherein each of the receiver data channel and the transmitter data channel comprises a respective variable resistance circuit at the respective host device node.

Claim 17 (original): The communications module of claim 16, wherein each variable resistance circuit presents different termination impedances at the respective host device node in response to receipt of different respective electrical control signals from the termination impedance controller.

Claim 18 (original): A method of making a communications module, comprising:
obtaining a data channel operable to translate data signals in at least one direction between a transmission cable interface and a host device interface and having a variably configurable termination impedance at a host device node connectable to a host device;
mounting the data channel in a housing having a first end connectable to a transmission cable and a second end connectable to a host device; and
setting the variably configurable termination impedance of the data channel to a termination impedance value substantially matching a target host device termination impedance value.

Claim 19 (original): The method of claim 18, wherein the variably configurable termination impedance of the data channel is set after the data channel is mounted in the housing.

Claim 20 (original): The method of claim 18, further comprising storing the communications module before the variably configurable termination impedance of the data channel is set.

Claim 21 (new): The communications module of claim 1, further comprising a media connector that provides the transmission cable interface and is connectable to a connector of a transmission cable.

Claim 22 (new): The communications module of claim 21, wherein the media connector is connectable to a connector of an electrical communication cable.

Claim 23 (new): The communications module of claim 22, wherein the media connector is one of a DB-9 electrical connector, an RJ45 receptacle, and a HSSDC electrical connector.

Claim 24 (new): The communications module of claim 21, wherein the media connector is connectable to a connector of an optical communication cable.

Claim 25 (new): The communications module of claim 24, wherein the media connector is one of a simple connector (SC) duplex media connector, an LC connector, and a MTP/MPO connector.

Claim 26 (new): The communications module of claim 10, wherein the housing is implemented in accordance with a pluggable communication module standard selected from a Giga-Bit Interface Converter (GBIC) standard, a small form physical (SFP) standard, and a small form factor (SFF) standard.